

APPENDIX A
MARKED-UP COPY OF THE AMENDED PARAGRAPH
CPA OF U.S. PATENT APPLICATION SERIAL NO. 08/986,186
ATTORNEY DOCKET NO. 8757-009-999

Methods for Generating and Screening Novel Metabolic Pathways

[The application is a continuation-in-part of application Serial No. 08/639,255, filed April 24, 1996, which is hereby incorporated by reference in their entirety.]

This application is a division of U.S. Patent Application Serial No. 08/738,944 filed November 24, 1996 (now U.S. Patent No. 5,783,431) which is a continuation-in-part of U.S. Patent Application Serial No. 08/639,255 filed April 24, 1996 (now U.S. Patent No. 5,824,485) which is a continuation-in-part of U.S. Patent Application Nos. 08/427,244 and 08/427,348 both filed on April 24, 1995, the entire contents of each of which is incorporated herein by reference in its entirety.

1. FIELD OF THE INVENTION

The present invention relates to a novel approach to drug discovery. More particularly, the invention relates to a system for preserving the genomes of organisms that are good or promising sources of drugs; for randomly combining genetic materials from one or more species of organisms to generate novel metabolic pathways; and for pre-screening or screening such genetically engineered cells for the generation of novel biochemical pathways and the production of novel classes of compounds. The novel or reconstituted metabolic pathways can have utility in commercial production of the compounds.